

Application No. 09/848,770
Amendment dated August 03, 2005
Reply to Office Action of June 03, 2005

Amendments to the Figures

The Examiner objected to the drawings under 37 CFR § 1.83(a). Specifically, the Examiner contends that previous amendments to claims 11 and 24 must be shown in the drawings.

Applicants have amended claims 1, 17 and 22 and further amended claims 11 and 24 to further describe and particularly point out that which Applicants regards as their invention. In doing so, Applicants believe they have obviated the Examiner's objection to the drawings. Despite this belief, Applicants respectfully point the Examiner to at least Figures 4, 6 and 11-16 as illustrative in combination, if not alone, of amended claims 1, 11, 17, 22 and 24. As such, Applicants respectfully request that the Examiner withdraw his objections to the drawings.

If, after reviewing the instant office action response, the Examiner wishes to maintain his objection to the drawings, Applicants request a teleconference with the Examiner so that Applicants may understand exactly the subject matter the Examiner contends is not reflected in the current drawings.

REMARKS

Claims 1-26 are rejected by the Examiner. Claims 1-26 are still pending. Claims 1, 11, 17, 22 and 24 have been amended. Reconsideration is respectfully requested in view of the amendments above and the following remarks.

Claim Rejections - 35 U.S.C. §102

Claims 1-26 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,857,201 issued to Wright et al. (hereinafter referred to as "Wright"). In view of the foregoing amendments and following arguments, Applicants respectfully traverse.

Wright discloses a system that can support applications on mobile computing devices that do not rely on persistent connections to existing enterprise systems. This system allows for occasional connections to these systems and proposes a development platform "such that developers have the ability to create applications using a series of forms, tables, and communications agents, and the ability to deploy and maintain these applications." What Wright primarily discloses is a system that abstracts client applications from the complexities of "communication, transport, multi user, and concurrency issues." What the Wright system does not do is adequately isolate clients from certain data management complexities that the present invention seeks to address.

In contrast to Wright, the present invention addresses important data management issues inherent in mobile applications by showcasing the importance of a mobile data model to the process. Wright does not address the importance of data models. In fact, while a data model can be implied by a system requiring persistence of structured data, including Wright, the Wright method does not disclose any entity that can be shown to resemble or anticipate mobile data models, nor does it disclose critical features for which the present invention provides.

The present invention proposes a formal description of the mobile data model that is specifically and deterministically expressed, not implied. The present invention also teaches that a mobile data model must be decoupled, or independent from other components of the system. While Wright may "disclose the use of a data model that allows a database to exist in several forms," with a primary database on the server and a temporary representation on the client, the "data model" is an implied one, not specifically and deterministically expressed. If a "data model" exists in Wright, it

exists only as a manifestation of the actions of the client programs or the logic manifest in those actions. It is not a true mobile data model as defined by the instant application, which is defined explicitly and separately from client programs. Wright does not disclose or teach this particular concept.

As the examiner points out, the Wright system provides an API (application programming interface) that “allows a server to access multiple previously existing sources” and a “service object” that “separates the data model from a particular client interface by handling communications transport, multi user, and concurrency issues.” While somewhat true, Applicants respectfully traverse on at least one point. The “service object” in Wright separates the client from “communications” concerns, but it does not abstract the client from the “data model.” Abstracting the client from the “data model” is impossible in the Wright system because, from the perspective of the client, the data model is not an independent entity. The service object of Wright does not have an understanding of the model, it acts only as a “pass through” mechanism. As stated by Wright, the “FormLogic Server 132 serves as a “gateway” between FormLogic clients (e.g., 136, 142, 146) and enterprise data sources (e.g., 180, 182).” (See 6:28-30). The service object only relieves the client from non-persistent communications. It does not relieve the client from the data model, because in the Wright method, the client is itself the only expression of that model.

Because the Wright method only implies the general nature of data models, and does not specifically teach the value of a decoupled mobile data model, it also fails to disclose the specific aspects of the mobile data model disclosed by the present invention. Certain of these aspects are recited in the amended claims.

In addition to not disclosing, teaching or otherwise suggesting mobile data models, Wright also fails to anticipate them. This is evident in the highly procedural and programmatic method that client applications must use to interact with other components in the Wright system. In the Wright system, products like FormLogic provide a layer underneath custom programs which reacts directly to commands and messages issued by these programs. Any and all understanding of data structures is encapsulated in the specific procedures executed by these programs, the messages exchanged and the API functions supported by the service objects. If the structure of the data changes, so must the custom programs. In other words, the system is typically “hard wired” to a particular model and cannot change without significant work.

In the present invention, the mobile data model abstracts client programs from changes to data structure by encapsulating them in an independent, decoupled component. If the physical structure of the data, the relationship between elements, the rules which govern its distribution, and/or various other attributes must change, these alterations can be made in the model without significant supplementary programming. This aspect and ability of the present invention is yet another differentiating element of the present invention that is not anticipated by Wright.

In light of the above, it is clear that Wright fails to anticipate, disclose, teach or otherwise suggest a method for use of a software application comprising, among other elements, creating a mobile data model, the mobile data model explicitly describing one or more data elements, data relationships, data dependencies and data distribution attributes required by a mobile application, wherein the mobile data model is an independent entity, decoupled from a particular interface and enterprise data source as claimed in claim 1. Accordingly, Applicants respectfully request that the Examiner reconsider the rejection to Claim 1, withdraw the rejection and allow Claim 1 to issue.

Claims 2-10 depend from and provide further patentable limitations to independent Claim 1. Applicants respectfully request that the Examiner reconsider the rejection to Claims 2-10, withdraw the rejections and allow Claims 2-10.

Similarly, Wright fails to anticipate, disclose, teach or otherwise suggest a system for application development in a mobile domain comprising, among other elements, a mobile data model, the mobile data model explicitly describing one or more data elements, data relationships, data dependencies and data distribution attributes required by a mobile application, wherein the mobile data model is an independent entity, decoupled from a particular interface and enterprise data source and operable to enable changes in data structure and data handling without requiring programmatic changes in the enterprise back end and wherein the mobile data model is instantiated on a distributed computing platform to create a mobile data store containing enterprise information as claimed in claim 11. Accordingly, Applicants respectfully request that the Examiner reconsider the rejection to Claim 11, withdraw the rejection and allow Claim 11 to issue.

Claims 12-16 depend from and provide further patentable limitations to independent Claim 11. Applicants respectfully request that the Examiner reconsider the rejections to Claims 12-16, withdraw the rejections and allow Claims 12-16.

Further, Wright fails to anticipate, disclose, teach or otherwise suggest a system comprising, among other elements, a mobile data model explicitly describing one or more data elements, data relationships, data dependencies and data distribution attributes required by a mobile application, wherein the mobile data model is an independent entity, decoupled from a particular interface and enterprise data source and wherein changes to the mobile data model effect changes in system data descriptions and rules governing data handling without requiring programmatic changes in applications included in an enterprise back-end or mobile device, as claimed in claim 17. Accordingly, Applicants respectfully request that the Examiner reconsider the rejection to Claim 17, withdraw the rejection and allow Claim 17 to issue.

Claims 18-21 depend from and provide further patentable limitations to independent Claim 17. Applicants respectfully request that the Examiner reconsider the rejections to Claims 18-21, withdraw the rejections and allow Claims 18-21.

In addition, Wright fails to anticipate, disclose, teach or otherwise suggest a method for application deployment comprising, among other elements, communicating a client-side application and a portion of a deployable mobile data model to the mobile computing device, the mobile data model decoupled from a particular client interface and enterprise data source and capable of independently describing key details required by a client-side application as claimed in claim 22. Accordingly, Applicants respectfully request that the Examiner reconsider the rejection to Claim 22, withdraw the rejection and allow Claim 22 to issue.

Claim 23 depends from and provides further patentable limitations to independent Claim 22. Applicants respectfully request that the Examiner reconsider the rejection to Claim 23, withdraw the rejection and allow Claim 23.

Finally, Wright fails to anticipate, disclose, teach or otherwise suggest a method for application development and deployment comprising, among other elements, developing a mobile data model, the mobile data model decoupled from a particular client interface and enterprise data source and explicitly describing one or more data elements, data relationships, data dependencies and data distribution attributes required by a mobile application as claimed in claim 24. Accordingly, Applicants respectfully request that the Examiner reconsider the rejection to Claim 24, withdraw the rejection and allow Claim 24 to issue.

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Claims 25-26 depend from and provide further patentable limitations to independent Claim 24. Applicants respectfully request that the Examiner reconsider the rejections to Claims 25-26, withdraw the rejections and allow Claims 25-26.

Examiner Interview

On July 29, 2005, Applicants conducted an interview with the Examiner. Discussed during this interview were the claims currently pending in this matter and the prior art of record.

CONCLUSION

In light of the remarks set forth above, Applicants believe that they are entitled to letters patent in the present matter. Applicants respectfully solicit the Examiner to expedite prosecution of this patent application to issuance. Should the Examiner have any questions or feel that further prosecution of this matter may be expedited through an interview the Examiner is encouraged to telephone the undersigned.

The Commissioner is authorized to charge any additional fees which may be required, including petition fees and extension of time fees, to Deposit Account No. 23-2415 (Docket No. 26625-704).

Respectfully submitted,

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